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of America*

Vols. 70-73 1980-1983

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of America A*

OPTICS AND IMAGE SCIENCE,

Vol. 1 1984

*Journal of the
Optical Society
of America B*

OPTICAL PHYSICS, Vol. 1 1984

CUMULATIVE INDEX

optics index

1980-1984

The indexed material covers subject and author entries of five publications:

Journal of the Optical Society of America

Vols. 70-73 (1980-1983)

Journal of the Optical Society of America **A**: Optics
and Image Science

Vol. 1-(1984)

Journal of the Optical Society of America **B**:

Optical Physics

Vol. 1 (1984)

Applied Optics

Vols. 19-23 (1980-1984)

Optics Letters

Vols. 5-9 (1980-1984)

Journal of Lightwave Technology

Vols. 1 and 2 (1983-1984)

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Preface

In 1974 the Optical Society of America began production of the annual indexes for its journals from information stored on magnetic tape for each issue. This was not only to produce an annual index for each journal but to be able to produce a merged cumulative index for all OSA journals. The first OPTICS INDEX covered 1974–1979.

The indexed material includes subject and author entries for Vols. 70–73 (1980–1983) of the *Journal of the Optical Society of America*; in 1984 JOSA was divided into two parts: JOSA-A, Vol. 1, and JOSA-B, Vol. 1; Vols. 19–23 (1980–1984) of *Applied Optics*; Vols. 5–9 (1980–1984) *Optics Letters*; and Vols. 1 and 2 (1983–1984) of the *Journal of Lightwave Technology* (published jointly with the Institute of Electrical and Electronic Engineers).

Subjects are indexed by key word, and the user should remember there is a style connected with key words, which can change with time, for example, laser for maser. Further, there are new subjects which have acquired importance such as bistability, femtosecond phenomena, charged coupled devices, and buried heterostructure lasers. Some areas such as fiber optics have many new subdivisions and applications, and much of this evolution took place during the five-year period covered by this index. Thus, many early articles will not be indexed as specifically as those appearing late in the period. Help with this problem of where material may be found, or related material, is given by the *See* and *See also* entries. In addition, most articles appear under several entries, e.g., the material measured, the instrument used, the application, and the discipline.

Computer handling of the material makes compiling the annual indexes much easier and facilitates later combining of the material into a cumulative index. One problem continues to give trouble: Even though a serious

effort is made to combine all variations of an author's name into the most complete form for the annual index, when all volumes and journals are combined the work has to be done again for many hundreds of authors. When an author's name is stored in the form on a published article, and then later the computer is asked to alphabetize authors for an annual or cumulative index it will list all forms as separate authors. Similar names may or may not be the same person, and often there are two or more people with the same initials, especially if only one initial is given. Though much time has been spent eliminating discrepancies there may still be some.

To aid in identification of the material key letters are given in many cases:

- (A) abstract
- (B) book review
- (L) letter, rapid communication
- (M) meeting report
- (N) editorial, note in a department
- (P) patent.

To keep the volume within a reasonable size the author index lists the article's published title under the first-named author; only volume and page are given under other authors. Under a given author all entries are alphabetized by title for the sole author's articles first, followed by articles alphabetized by the name of the second author. Under subjects cross references are helpful since there is no consistent rule for usage whether material will be listed under the adjective or the noun; hence it is Spectroscopy, atomic, not Atomic spectroscopy; Image processing, not Processing, image; Remote sensing, not Sensing, remote. Under a topic or given subject actual published titles are used so that editors, with the cooperation of authors, have attempted to make the first word of the title meaningful, e.g., Field spread of a beam, not The field spread.

Optical Society of America

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335 E. 45th St
New York, N.Y. 10017

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- Matrix optical analysis of skew rays in mixed systems of spherical and orthogonal cylindrical lenses, AO 23: 2706
- Maximum and effective numerical apertures of a planar microlens, AO 23: 1784
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